

COLLEGE OF ENGINEERING

ENGINEERING

Southern Illinois University at Carbondale

Course Substitution List

Waubonsee Community College 2006-07

College Name/Catalog Date

| SIUC 2008-09 | | | | | Waubonsee Community College 2006-07 | |
|-----------------------|------------------------------------|------------------------------------|------------------------|-----------------------|--|----------------------|
| Civil Engineering | Computer Engineering | Electrical Engineering | Mechanical Engineering | Mining Engineering | Course Title | Course Substitute(s) |
| ENGR 102 | -- | -- | ENGR 102 | ENGR 102 | Eng. Graphics | EGR 101 |
| -- | | | ENGR 222B | -- | C++ Programming | CIS 130 ¹ |
| -- | ECE 222 | ECE 222 | -- | -- | JAVA | CIS 150 ² |
| -- | CS 220 | --T | -- | -- | Prog. Data Structures | |
| CE 250 | --T | --T | Engr 260A | CE 250 | Statics | EGR 220 |
| CE 251 | -- | -- | ME 261 | CE 251 | Dynamics | EGR 230 |
| CE 350A | -- | -- | CE 350A | CE 350A | Mechanics of Deform. Bodies | |
| -- | ECE 235 ³ | ECE 235 ³ | ENGR 335 | -- | Elec. Circuits | EGR 240 |
| -- | ECE 225 | ECE 225 | -- | -- | Digital Systems | |
| CHEM 200 + CHEM 201 | CHEM 200 + CHEM 201 ⁴ | CHEM 200 + CHEM 201 ⁴ | CHEM 200 + CHEM 201 | CHEM 200 + CHEM 201 | Intro. Chem. Principles | CHM 121 |
| CHEM 210 | --T | --T | CHEM 210 | CHEM 210 | General & Inorganic Chem. | CHM 122 |
| -- | -- | -- | -- | GEOL 220 | Physical Geology | |
| MATH 150 | MATH 150 | MATH 150 | MATH 150 | MATH 150 | Calculus I | MTH 131 |
| MATH 250 | MATH 250 | MATH 250 | MATH 250 | MATH 250 | Calculus II | MTH 132 |
| MATH 251 | MATH 251 | MATH 251 | MATH 251 | MATH 251 | Calculus III | MTH 233 |
| MATH 305 | MATH 305 | MATH 305 | MATH 305 | MATH 305 | Diff. Equations | MTH 240 |
| -- | --T | --T | -- | -- | Intro. to Linear Algebra | MTH 236 |
| PHYS 205A + PHYS 255A | PHYS 205A + PHYS 255A | PHYS 205A + PHYS 255A | PHYS 205A + PHYS 255A | PHYS 205A + PHYS 255A | Univ. Physics I | PHY 221 |
| PHYS 205B + PHYS 255B | PHYS 205B + PHYS 255B | PHYS 205B + PHYS 255B | PHYS 205B + PHYS 255B | PHYS 205B + PHYS 255B | Univ. Physics II | PHY 222 |
| PHYS 205C + PHYS 255C | PHYS 205C + PHYS 255C ⁴ | PHYS 205C + PHYS 255C ⁴ | -- | -- | Univ. Physics III | |

¹ C++ Programming is recommended for Mechanical Engineering Majors.

² JAVA Programming is Recommended for Electrical and Computer Engineering Majors.

³ One Hour of Laboratory be required at SIUC.

⁴ Third science course may be Chemistry I **or** Physics III for Electrical and Computer Engineering Majors

-- Not Required

--T Not Required But Will Count as Technical Elective

COLLEGE OF ENGINEERING
 ENGINEERING TECHNOLOGY
 Southern Illinois University at Carbondale
 Course Substitution List

Waubonsee Community College 2006-07
 College Name/Catalog Date

| SIUC 2008-09 | Waubonsee Community College 2006-07 | |
|--------------------------------------|--|-------------------------|
| Electrical Engineering Technology | Course Title | Course Substitute(s) |
| ENGR 222B | C++ Programming | CIS 130 |
| --T | Engineering Drawing I | -- |
| --T | Engineering Drawing II | -- |
| ET 238 | Digital Electronics | ELT 231 |
| ET 245A | Elec. Systems | ELT 112 |
| --T | Processes Lab | -- |
| --T | Statics | EGR 220 |
| --T | Dynamics | EGR 230 |
| ET 304A ¹ | Electrical Circuits | EGR 240 |
| CHEM 140A | Chemistry | CHM 100 + 101 |
| MATH 111 | College Algebra & Trigonometry | MTH 110 + 112 |
| MATH 140 | Short Course in Calculus | MTH 211 |
| MATH 282 | Intro. to Statistics | MTH 107 |
| PHYS 203A + PHYS 253A | College Physics I | PHY 111 or 115 |
| PHYS 203B + PHYS 253B | College Physics II | PHY 112 or 116 |

¹ One Hour of Laboratory in Electric Circuits Will Be Required at SIUC.
 --T Not Required But Will Count as Technical Elective

COLLEGE OF ENGINEERING
INDUSTRIAL TECHNOLOGY
 Southern Illinois University at Carbondale
 Course Substitution List

Waubonsee Community College 2006-07
 College Name/Catalog Date

| SIUC 2008-09 | | Waubonsee Community College 2006-07 |
|---------------------------|------------------------------------|--|
| Industrial Technology | Course Title | Course Substitute(s) |
| IT 105 | Computer-Aided Drafting | EGR 101 |
| IT 208 | Manufacturing Processes | CAD 130 or IDT 130 |
| IT 270 or CS 200B | Introduction to Business Computing | CIS 115 or 110 |
| IT 307 or MATH 140 | Short Course in Calculus | MTH 211 |
| IT 445 | Computer-Aided Manufacturing | MFT 264 or 266 |
| MATH 111 | College Algebra and Trigonometry | MTH 110 + 112 |
| PHYS 203A + PHYS 253A | College Physics I | PHY 115 or 111 |
| PHYS 203B + PHYS 253B | College Physics II | PHY 116 or 112 |
| TE | Technical Electives - 29 hours | Up to 29 technical elective hours may be transferred in IT. The technical elective requirement is fulfilled with an A.A.S. Degree. |
| IT 351 | Industrial Metrology | IDT 134 + 195 |
| IT 209 | Manufacturing Processes Laboratory | IDT 132 |
| IT 445 | Computer Aided Manufacturing | IDT 260 |
| IT 319 | Industrial Internship | IDT 299 or IDT 297 + 298 |